



# **Overview of EPA's Activities on Solvents under the Toxic Substances Control Act (TSCA)**

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# Overview

- The Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act
- First 10 Chemicals
- Halogenated Solvents
- Section 6 Rulemakings
- Additional Information

# The New Chemical Safety Law

- The Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act
  - Amended and updated the Toxic Substances Control Act (TSCA)
  - Signed by the President on June 22, 2016
  - New authorities and responsibilities for EPA
- Framework Rules
  - TSCA requires EPA to promulgate procedural rules to align EPA's chemical management program with the new requirements and responsibilities in TSCA:
    - Prioritization
    - Risk Evaluation
    - Active/Inactive Inventory
  - Comment period closed March 20, 2017
  - Must finalize within 1-year of enactment or by June 22, 2017

# Initial Ten Chemicals

- EPA identified and published a list of the initial 10 chemicals for risk evaluation on December 19, 2016

1,4-Dioxane

**1-Bromopropane**

Asbestos

**Carbon Tetrachloride**

Cyclic Aliphatic Bromide Cluster (HBCD)

**Methylene Chloride**

N-methylpyrrolidone (NMP)

Pigment Violet 29

**Tetrachloroethylene, or perchloroethylene (perc)**

**Trichloroethylene (TCE)**

- Staff technical point of contact for each chemical on EPA website
- Public meeting on scope of risk evaluations held February 14, 2017
  - Stakeholders provided additional information on uses of each chemical
- Scope of Risk Evaluations – June 19, 2017
  - **Identification** of hazards, exposure, conditions of use, potentially exposed or susceptible subpopulation(s) (statutorily required)
  - **Conceptual Model** which will describe actual or predicted relationships between the chemical, and humans and the environment
  - **Analysis Plan** which will describe approaches, methods, and/or metrics to assess exposures, effects, and risks.



# Methylene Chloride

- Industrial and commercial uses include:
  - Cleaner and degreaser
  - Chemical processing (e.g. pharmaceutical manufacturing, plastics, other chemicals)
  - Polyurethane foam blowing agent
  - Adhesives
  - Paint and coating removal
  - Laboratory solvent
  - Lubricant
  - Cold pipe insulation
  - Anti-splatter in welding
- Commercial and consumer uses include:
  - Adhesives
  - Paint and coating removal
  - Lubricant
  - Anti-splatter in welding
  - Novelty items
  - Misc. aerosol applications
- Contact: Ana Corado, [Corado.ana@epa.gov](mailto:Corado.ana@epa.gov), (202) 564-0140



# Trichloroethylene

- Industrial and commercial uses include:
  - Degreaser and cleaner (vapor, cold cleaning, aerosol)
  - Intermediate in refrigerant manufacture
  - Adhesives
  - Sealants
  - Lubricants
  - Die fluid
  - Mold release
  - Spot cleaning in dry cleaning facilities.
- Commercial and consumer uses include:
  - Cleaning wipes
  - Carpet cleaners
  - Adhesives
  - Hoof polish
  - Pepper spray
  - Sealants
  - Lubricants
  - Toner aids
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# Carbon Tetrachloride

- Industrial and commercial uses include:
  - Feedstock for:
    - Refrigerants (HFCs, CFCs, HCFCs)
    - Perchloroethylene
    - Agricultural chemicals and pharmaceuticals
  - Processing agent:
    - Elimination of  $\text{NCl}_3$  in chlor-alkali production
    - Chlorine recovery by tail gas absorption in chlor-alkali production
    - Production of chlorinated rubber
    - Production of chlorosulfonated polyolefin (CSM)
  - Laboratory and analytical use
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# **Tetrachloroethylene** **(also known as perchloroethylene)**

- Industrial and commercial uses include:
  - Degreaser and cleaner
  - Feedstock for manufacturing chlorinated chemicals
  - Industrial catalyst regeneration
  - Adhesives
  - Sealants
  - Lubricants
  - Penetrants
  - Polishes
  - Coatings, inks, dyes
  - Pesticides
  - Dry cleaning chemical
  - Cleaning products
  - Embalming fluids
  - Laboratory applications
- Commercial and consumer uses include:
  - Lubricants
  - Penetrants
  - Sealants
  - Adhesives
  - Polishes
  - Coatings, inks, dyes
  - Cleaning products
  - Pesticides
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# 1-Bromopropane

- Industrial and commercial uses include:
  - Intermediate in chemical manufacture (organic, inorganic and agricultural)
  - Spray Adhesive (foam cushions, furniture industry)
  - Dry Cleaning
  - Degreaser (vapor, cold cleaning, aerosol)
  - Mold release
  - Lubricant and cutting oil
  - Refrigerant
  - Insulation
- Consumer uses include:
  - Adhesive (aerosol) and adhesive accelerant
  - Spot Remover (aerosol)
  - Aerosol Cleaner and Degreaser (engine degreasing, brake cleaning, electronics cleaning)
  - Other cleaners (e.g. coin cleaning, scissors cleaning)
  - Paintable mold release
- Contact: Ana Corado, [Corado.ana@epa.gov](mailto:Corado.ana@epa.gov), (202) 564-0140



# Halogenated Solvents

- First 10 chemicals include 5 halogenated solvents:
  - Used in a range of different applications
  - Substitutes for each other in various applications
- EPA is seeking additional information on:
  - Uses of these solvents
  - Exposures to these solvents
  - Availability of safer alternatives
  - Technical feasibility of alternatives
  - Economic feasibility of alternatives

# Section 6 Rulemakings

- TSCA gave EPA specific authority under TSCA section 26(l)(4) to proceed with risk management actions on chemicals already assessed under the TSCA Work Plan, even though these assessments were for subsets of the chemicals' uses
- Assessments for TCE, methylene chloride, and N-methylpyrrolidone (NMP) all demonstrated significant risks to workers
  - TCE 1 (spot cleaning and aerosol degreasing)
    - Proposed rule December 16, 2016
    - Comment period closed on March 16, 2017
  - TCE 2 (vapor degreasing)
    - Proposed rule January 19, 2017
    - Comment period closes on May 19, 2017
  - Methylene Chloride and NMP (paint removal)
    - Proposed rule January 19, 2017
    - Comment period closes on May 19, 2017

# Additional Information

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- Additional information:
  - EPA's TSCA Implementation Activities website at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/frank-r-lautenberg-chemical-safety-21st-century-act>